CLASSIFICATION SECRET/ 25X1

CENTRAL INTELLIGENCE AGENCY 25X1

INFORMATION REPORT

COUNTRY	USSR	DATE DISTR.	30 Jun 1953
SUBJECT	Aircraft Inspections in VVS Units	NO. OF PAGES	4
PLACE ACQUIRED		NO. OF ENCLS. (LISTED BELOW)	
DATE ACQUIRED BY SOURCE		SUPPLEMENT TO REPORT NO.	
DATE OF INFORMATION			

25X1

THIS IS UNEVALUATED INFORMATION

25X1

1. Each air unit from a regiment up compiles a Combat Training Measures Plan which is to be carried out during the following month. In addition to other measures, this plan sets up aircraft inspections. The plan states: the measure's designation, the time at which it is to be carried out, who is to carry it out, who is responsible for the particular measure (and the period for which this individual is responsible) and, the place where it is to be carried out.

2. In accordance with the above plan, the regimental senior engineer compiles his own detailed plan of how aircraft inspections are to be conducted. This plan deals with all the aspects of aircraft inspections in the air squadrons. The regimental senior engineer appoints an aircraft inspection commission from among the technical personnel of the squadrons and the regimental command. He is the head (or chairman) of this commission. On the day appointed for the inspection, representatives from the air squadrons' technical personnel report to the regimental senior engineer who informs all of the commission's members of the purpose of the commission and the work to be done in a specified period of time; furthermore, he briefs them on the present day's assignments. After this, the commission leaves for the squadron whose aircraft are to be inspected on that particular day.

3. The squadron engineer makes a brief, verbal report on the general condition of aircraft in his air squadron to the commission's head (the regimental senior engineer).

4. After receiving the air squadron engineer's report, the commission's head informs him of the purpose of the commission, and then the commission proceeds to the given squadron's aircraft parking area and selects, at its own discretion, several

CLASSIFICATION SECRET 25X1

STATE	X	NAVY	X	DISTRIBUTION
ARMY	X	AIR	X	

aircraft which it inspects in the presence of each aircraft's aircraft mechanic, aircraft technician, flight technician and squadron engineer (actually the squadron senior technician). The commission includes the following various specialists: armaments, special equipment, and aircraft technicians and engineers.

5. All of the above specialists inspect the part of the aircraft which their specialty covers; they note down any defects which they have discovered and inform the aircraft's mechanic and technician of the defects. On each aircraft that is to be checked the commission inspects the condition of the turbine (or engine) by means of a surface examination - in other words, the turbine (or engine) is not removed from the fuselage and is not stripped-down; the armaments which are partially stripped-down since, in the case of the MIG-15, the armaments are easily removed and replaced; and the aircraft's special equipment (such as the radio, instruments and electrical equipment).

6. Before the commission inspects a given aircraft, it familiarizes itself with the aircraft's log; afterwards it notes down the results of the inspection in the log. After all aircraft designated for inspection have been inspected, the regimental senior engineer summons all of the technical command personnel of each air squadron to a conference where all of the commission's inspection efforts are summed up. At this conference, the regimental senior engineer directs the attention of the technical command personnel towards the defects which were discovered during the aircraft inspection and points out means of eliminating these defects. After the conference, the regimental senior engineer compiles a plan for an order about the results of the aircraft inspection. In the order he proposes punishing guilty individuals (those who are responsible for the poor condition of the aircraft) and congratulating individuals whose aircraft is in an excellent condition. He then presents the plan of the order to the regimental commander and chief of staff for signature.

7. After the senior regimental engineer's conference, the air squadron engineers (air squadron senior technicians) conduct their own conferences which are attended by all of the squadron's technical personnel (from the assistant mechanics to the air squadron engineers).

8. The same matters are discussed at this conference as at the regimental senior engineer's conference and similar instructions are given to the squadron technical personnel.

9. Air divisions plan aircraft inspections for their air regiments once every two months; air corps inspect once every three months and air armies once a year. The above commissions consist of various specialists selected by the headquarters. For example: if the corps is inspecting the condition of aircraft in a division, the commission will consist solely of engineers from the given headquarters. However, when aircraft within the division's units are being inspected, engineers from the air divisions will work with the corps commission.

10. In all cases, inspections of aircraft within the units of a division by divisional commissions and commissions from higher level headquarters are conducted during the period of the combat training inspection. At this time the members of the commission will be different from those mentioned above.

11. The divisional commission that inspects the state of combat training includes the following individuals: the air division commander is the head of the commission; his deputy or divisional chief of staff may also be the head of the commission; the members are: the divisional navigator, inspector of pilot proficiency, officers of the operations section, the chief of communications, deputy chief of staff, chief of the medical service, and the divisional engineers.

12. The above members of the commission include all aspects of combat training during their inspection as well as the condition of aircraft. Each specialist inspects his own service. As a rule, such a combat training inspection lasts for two and three days. After the commission's work is over, its head summons a conference of all regimental command personnel from a flight commander (or in some cases an air squadron commander) up. At the conference, the head of the commission calls forth the various members of the commission in the order of their service's importance and has them report on the condition of the service which they inspected; in doing this, they must point out both the positive and the negative factors of the service and the reasons for these factors. After all of the members of the commission have reported, the head of the commission makes his preliminary conclusions and instructs the regimental commander and chief of staff on how to eliminate the above mentioned defects in a specified period of time. After this the commission returns to its headquarters; the head of the commission directs its members to turn over all notes on the results of the combat training inspection to the operations section where all of the data is integrated and a detailed plan for a divisional order is prepared. It is then turned over to the Air Division's Commander and Chief of Staff for signature. The order states all negative and positive factors discovered during the inspection and the reasons for the negative factors as well as the measures by which they may be eliminated in the specified period of time. After the specified period of time has elapsed, the commission checks again to see if the order listing defects discovered during the last inspection has been carried out. For this purpose, the commission's personnel are the same as before and it checks only on defects

listed in the order. If the defects are in respect to aircraft, the aircraft are once again checked; however, at least two weeks must elapse between the two inspections.

13. The divisional commission inspects all of the regiments in order in one month, and in some months, only one regiment will be inspected during the month; this will depend on the schedule of the combat training measures plan.

14. The corps' commission conducts its inspections on the same principle as the division; it designates the division that it is going to inspect during the given period in its plan. In this manner the corps commission does not check the same division more than once or twice a year on combat training questions. The corps commission inspects the divisions headquarters and the air regiments.

15. When an air army commission inspects a corps, it inspects the air corps headquarters, a divisional headquarters, and the regiments of the division.

16. The inspection procedure, personnel of the commission, and formulation of the commission's results are similar to those of the air division.

17. Furthermore, at the beginning of the summer and winter periods, the engineering service of higher level headquarters inspects the preparation of aircraft for winter or summer operation in the units of an air division, the divisions of a corps, and the units and joint units of an air army. For this purpose, the air army headquarters issues an order to convert aircraft to winter or summer operations. This order designates which units or joint units of the air army must complete the conversion of their aircraft to winter or summer operations within a period of time specified in the order; it also states that this must be done without interrupting flight operations (in other words, without a cancellation of flights due to the conversion of aircraft to winter or summer operations). In such cases, the order will state that the preparation of aircraft for winter or summer operations will be inspected by the air army commission. The air army commission does not inspect all of a corps division, but selects one or two divisions of a corps for this purpose; the remaining divisions are then inspected by a corps commission. Furthermore, within each division a divisional commission inspects the preparation of aircraft for winter or summer operations in each regiment. All of the above commissions consist solely of representatives from the engineering-technical service of the headquarters at which the commission was formed. These commissions inspect all aircraft in a regiment and then they sum up the results of the conducted inspection which are turned over in the form of an order to the headquarters at which the commission was formed. This order praises individuals and units which successfully carried out the preparation of their aircraft for summer and winter operations and sets punishments for those who were negligent in preparing their aircraft.

18. Such a conversion to summer and winter operations occurs at different times in different air armies and VVS Military Districts; conversion to summer operations occurs earlier and to winter operations later in the southern regions. For this reason, the first order to convert aircraft to winter or summer operations is issued at air army headquarters.

19. In addition to all aircraft inspections by commissions, each aircraft is checked by its mechanic and technician, the aircraft mechanic and aircraft technician, before flights. Two hours are allotted for this check and three hours for the post-flight check. These checks are designated as "the aircraft preflight inspection" and "the aircraft post flight inspection." In addition, each aircraft receives a surface check after each flight.

20. Besides these inspections, one or two days of each month are spent on aircraft maintenance. During these days, the aircraft mechanic and aircraft technician check the aircraft's engine and fuselage; all discovered malfunctions are repaired and a notation is entered into the aircraft and engine's log. Special services' mechanics also work on the aircraft on these days. They check for malfunctions in the electrical equipment, armaments, and radio; any discovered defects are repaired by these individuals.

21. After logging twenty-five hours in the air, each aircraft has to undergo a periodic five hour inspection regardless of whether the aircraft has developed any malfunctions.

22. All of this is carried out in accordance with NIAS-43 (The Engineering-Aviation Service Manual of 1943).

23. All aircraft and engines, as well as other assembled units, that are produced at a factory, have an established number of hours (their "resource") that they must operate before they receive a medium or major overhaul. Each aircraft or aircraft engine has its own different number of "resource" hours. This resource is divided in the following manner:

Aircraft Fuselage

YAK - 9V	- 400 hrs
YAK - 11	- 350 hrs
YAK - 9P	- 400 hrs
YAK - 17	- 400 hrs
LA - 9	- 380 hrs
LA - 11	- 400 hrs
IL - 10	- 400 hrs
MIG- 15	- 400 hrs

Aircraft Engine

VK-105 PF - 2	- 180 - 200 hrs
ASH - 21	- 150 - 180 hrs
VK - 107 A	- 200 - 220 hrs
? 82	- 200 - 220 hrs
? 82	- 220 - 240 hrs
? M-107	- 250 hrs
RD - 45 F	- 80 - 90 hrs
RD - 45	- 80 hrs

24. The resource times given above are fairly accurate, but it should be kept in mind that the resource times may increase in the various series (f N.That is in the more perfected models within the same engine series) - especially in the case of jet engines. Resource times for aircraft fuselages are more stable then for engines.

25. After the aircraft, aircraft engine, or assembled unit has been operated for the period of time specified in its resource time, a commission inspects the engine, fuselage, or other assembled unit in the case of the motor, by partially stripping it without removing it from the aircraft. This commission consists of the following engineering technical personnel: the air regiment senior engineer, one air squadron engineer, senior flight technician, the air division senior engineer or his assistant, and the air corps chief engineer. The corps chief engineer is the commission's head; if he is absent, the air division senior engineer assumes this position.

26. When the commission is inspecting armaments or special equipment, its composition is different; it might be added that these parts are removed from the aircraft when being inspected in contrast with the engine.

27. After the inspection, the commission compiles a special report ("AKT") of the technical inspection in the form specified by the VVS Supreme Commanders' Order No 70, issued in 1948 or 1949. This report describes the complete history of the particular engine from the time that is left the factory to just before the inspection, whatever was found during the inspection resulting from the resource time being-up, and conclusions reached by the commission pertaining to further utilization of the engine. The conclusions may vary as for example: the commission may decide that the engine may be operated for another sixty hours before a controlled overhaul in a shop or at the factory; this conclusion would be entered into the report which would be sent to the air army's main engineer for authentication - he can authenticate it or make his own conclusion. If the army main engineer authenticates it, the engine will be utilized from that day on, on the new resource time; after the resource time has been exhausted, a commission of equal composition will once again inspect the engine. On other occasions, the commission may decide to send immediately the engine to the shop or factory for a controlled overhaul. The report would be authenticated in the same manner as in the former example.

28. If an aircraft has been in an accident or has suffered a breakdown, a similar commission conducts an inspection and reaches conclusions as to its future utilization; the commission may decide to scrap the aircraft and strip it for spare parts. Sometimes a commission will arrive at the following conclusion after it has inspected an engine which has exhausted its second "resource" time: "this engine is to be scrapped and stripped for spare parts."

29. The average life duration of an aircraft which was not involved in any flying accidents is three years; another factor which influences the average life duration of an aircraft is the way in which it was taken care of (that is whether it was kept in hangars or in the open).

30. The average life of an engine is two years if it does not receive a controlled overhaul or repairs in a shop or at the factory.

- end -